REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

In response to the rejection of claim 19 under 35 U.S.C. §101, claim 19 has been amended above so as to put it clearly within the realm of statutory subject matter.

The rejection of claims 1, 5, 8, 10, 11, 13, 15 and 18-20 under 35 U.S.C. §102 as allegedly being anticipated by Ratcliff is respectfully traversed.

Claim 1 has been amended by incorporating the features of original claim 4. New independent claim 21 has been added incorporating the feature of original claims 1 and 5. Corresponding amendments have been made to independent method claim 18, and new independent method claim 23 has been added.

Independent claims 1 and 18 are directed to the features of receiving all incoming data packets at the first operating system, and forwarding to the second operating system those packets that are not specifically for use by the first operating system or applications running thereon. Independent claims 21 and 23 are directed to the features of the first operating system selectively forwarding outgoing data packets from the first and second operating systems for transmission through the network interface. All independent claims additionally include the feature of the first and second operating systems sharing usage of a network interface that operates using a single set of network addresses common to both operating systems.

In other words, claims 1 and 18 relate to the management of incoming data packets, whereas claims 21 and 23 relate to the management of outgoing packets, in each case in a system in which a single network interface using a single network address is shared by two operating systems.

Ratcliff describes a method in which a kind of network data frame multiplexer/demultiplexer operates "underneath" a plurality of operating system partitions in order to enable the sharing of a network port between the partitions. The multiplexer/demultiplexer comprises a connection table that defines communication paths between the network port and the partitions, i.e., which performs "mapping." See, for example, col. 2, lines 23-34.

In contrast to Ratcliff, the presently claimed invention manages incoming and outgoing data packets in one of the operating systems (namely, the first operating system). In other words, the first operating system has exclusive control of the management of incoming and outgoing data packets. For example, in claim 1, this is reflected by the feature of:

> "code associated with the first operating system arranged to
> receive all incoming data packets, and to forward to the
> second operating system those packets which are not
> specifically for use by the first operating system or
> applications running thereon."

Corresponding features are recited in the other independent claims. These features are explained in detail in the description of Fig. 3.

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This is clearly different from Ratcliff's approach of using a mapping table "outside" the operating system partitions, i.e., a mapping table which is not exclusively controlled by one of the partitions.

The features of assigning exclusive control of the management of incoming and outgoing data packets to the first operating system has the advantage that the first operating system is enabled to provide (real time) "quality of service" (QoS) guarantees. The first operating system can do so because it oversees data packet communications that can affect QoS. That is, the first operating system can manage incoming and outgoing data packets <u>dependent on QoS requirements</u> that the first operating system may have to meet <u>at the same time</u>. For example, the first operating system can defer the forwarding of a received data packet to the second operating system if completion of another, more urgent, task is required to meet QoS.

Ratcliff includes no suggestion that the mapping table should (or indeed can) be controlled by only one of the partitions.

Given the fundamental deficiencies of Ratcliff already noted above with respect to some aspects of the independent claims, it is not believed necessary at this time to detail the additional deficiencies of this reference with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible for any reference to anticipate a claim unless it teaches each and every feature of that claim.

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The rejection of claims 2-4, 6, 7, 12 and 17 under 35 U.S.C. §103 as allegedly

being made "obvious" based on Ratcliff in further view of Ronkka '766 is also

respectfully traversed.

Ronkka appears irrelevant. According to the passages in Ronkka cited by the

Examiner, a communication device includes one processor to run two operating

systems simultaneously. The first operating system is a real time operating system

having a higher priority than the second operating system. In particular, the first

operating system implements mobile station functions, while the second operating

system implements data processing functions. The execution order of the thread of the

first and second operating systems is scheduled depending on the priority of the

threads. Generally, the threads of the first operating system have a higher priority.

Also, the operating systems share a message driver MD and message queues in order

to transmit messages between threads that are executed in different operating systems.

It is not understood why the Examiner considers Ronkka relevant to original

claims 4 and 5 which form the basis for the new independent claims. There is no

suggestion in Ronkka to manage <u>incoming</u> and <u>outgoing</u> data packets in <u>one of the</u>

<u>operating systems only</u>, i.e., to assign <u>exclusive</u> control of the management of incoming

and outgoing data packets to one of the operating systems.

In fact, there does not appear to be any information in Ronkka as to how a

network interface or, more particularly, a single set of network addresses, is shared by

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the operating systems of Ronkka. The Examiner is respectfully requested to either substantiate or, preferably, withdraw the rejection based on Ronkka.

Frankly, even if Ronkka were combined with Ratcliff, this would not result in the combination of features now recited by the new independent claims.

Given the fundamental deficiencies of this allegedly "obvious" combination of references with respect to certain aspects of the rejected claims as already explained above, it is not believed necessary at this time to detail additional deficiencies of this allegedly "obvious" combination of references with respect to other aspects of the rejected claims.

The rejection of claims 9 and 16 under 35 U.S.C. §103 as allegedly being made "obvious" based on Ratcliff in view of Tanenbaum is also respectfully traversed.

Fundamental deficiencies of Ratcliff have already been noted above with respect to parent claims. Tanenbaum does not supply those deficiencies. Accordingly, it is not necessary at this time to explain in detail additional reasons for traversal of this ground of rejection.

The rejection of claim 14 under 35 U.S.C. §103 as allegedly being made "obvious" based on Ratcliff in further view of Sebastian '308 is also respectfully traversed.

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Once again, fundamental deficiencies of Ratcliff have already been noted above with respect to a parent claim, and Sebastian does not supply those deficiencies. In any event, claim 14 has been cancelled, thus mooting this ground of rejection.

Attention has already been directed to new independent claims 21 and 23. In addition, the Examiner will note new dependent claim 22, which is believed to add yet further patentably distinction to the claimed invention.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

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